

ABSTRACT

The disclosed invention comprises a system and method for providing two-way content communication between wireless mobile communication devices, such as pagers and Personal Information Managers, and a remote computer network such as the Internet. The system includes a wireless two-way messaging network and an intermediary computer network in communication with the remote computer network. The wireless two-way messaging network employs a network and layer framework, preferably programmed in the wireless mobile device, that includes a system layer, an operating system layer, a user interface, and a Message Transport Protocol (MTP) stack.

The method for providing two-way content communication between wireless mobile communication devices and a remote computer network include originating a data request at the mobile communication device, transmitting the request via a queue to the intermediary computer system, retrieving the requested data from the remote computer system, and transmitting the retrieved data to the wireless mobile communication device via the wireless two-way messaging network. In the preferred embodiment, the retrieved data is transformed to an intermediary markup language, preferably Extensible Markup Language (XML), validated for MTP coding and transmission completeness, analyzed for type of data, and transformed to a target markup language. The validated, analyzed and transformed data is subsequently displayed at the mobile communication device in a suitable form, which in a preferred embodiment is a browser with a graphical user interface.

Data encryption and decryption is available for all data transmission in the present invention, and the system and method include means for placing all transmitted data into packets of maximum 448 characters, suitable for Short Messaging Service protocol and similar protocols.